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(54) **IN-CONVERSATION SEARCH**

(71) Applicant: **Google LLC**, Mountain View, CA (US)

(72) Inventors: **Maryam Garrett**, Boston, MA (US);  
**Richard A. Miner**, Boston, MA (US)

(73) Assignee: **Google LLC**, Mountain View, CA (US)

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See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

7,590,699 B2 9/2009 Natarajan et al.  
7,624,416 B1 11/2009 Vandermolen et al.  
7,856,469 B2 12/2010 Chen et al.  
8,121,997 B2 2/2012 Raciborski  
8,140,563 B2 3/2012 Midgley  
(Continued)

**FOREIGN PATENT DOCUMENTS**

EP 2634709 9/2013  
*Primary Examiner* — Azam M Cheema  
(74) *Attorney, Agent, or Firm* — Honigman LLP; Brett A. Krueger

(57)

**ABSTRACT**

A computer-implemented communications method is discussed. The method includes receiving a typed user input in a texting conversation on an electronic communication channel between two or more users of electronic communications devices; analyzing the user input to identify whether the user input contains a reserved word for triggering a search; submitting a search query received in association with the reserved word to a search engine, if the user input contains a reserved word; receiving one or more search results from the search engine; and providing, in the electronic communication channel for incorporation into the texting conversation, at least one of the one or more search results.

**17 Claims, 11 Drawing Sheets**

